5.14 VISUAL QUALITY AND AESTHETICS

This section assesses the visual affects of the alternatives and associated facilities and alignment features. Viewpoints along the corridor where the project alternatives and options could affect existing visual quality are identified and evaluated with and without a project. These include corridor locations possessing sensitive viewer groups or offering scenic views.

5.14.1 INTRODUCTION

Adverse effects to visual and aesthetic resources would include substantial degradation of the existing visual character or quality of the SVRTC and its surroundings, substantial contrast with the scale or visual context of the surrounding landscape, creation of a substantial new source of light or glare that would adversely affect day or nighttime views in the area, and substantially altering a scenic vista. Visual resource change is analyzed in terms of visual dominance and other specific visual effects of facilities that would be constructed under the BEP and SVRTP alternatives, together with the change in visual quality. Viewer responses to these changes are interpreted based on the sensitivity of the viewer types identified and the duration of views.

Three terms are used to describe effects on visual quality, including:

- **Vividness** – Refers to the visual power of memorability of landscape components as they combine in striking and distinctive visual patterns. Effects would be evaluated based on the degree to which they affect the visual power or memorability of the landscape components.

- **Intactness** – Refers to the visual integrity of the natural and man-made landscapes. Effects would be evaluated based on the degree to which they encroach into the visual integrity of the landscape.

- **Unity** – Refers to the visual coherence and compositional harmony of the viewshed. Effects would be evaluated based on the degree to which they disrupt the harmony of the landscape.

5.14.2 METHODOLOGY FOR EVALUATING ENVIRONMENTAL CONSEQUENCES

The approach for this visual assessment is adapted from the FHWA's visual impact assessment system (Federal Highway Administration, 1983) in combination with other visual assessment systems. The FHWA assessment system prescribes a systematic

means for defining a range of settings and determining how proposed changes can be evaluated. It is commonly used to assess the visual impacts of linear transportation projects throughout California. The visual impact assessment process involves identifying the following:

- Visual Resources (i.e., visual character and quality) of the region, the immediate action area and the action site (as described in Section 4.14, Visual Quality and Aesthetics)
- Viewer Groups (as described in Section 4.14, Visual Quality and Aesthetics)
- Important Viewing Locations and the general visibility of the action area and site (see Figure 5.14-1)

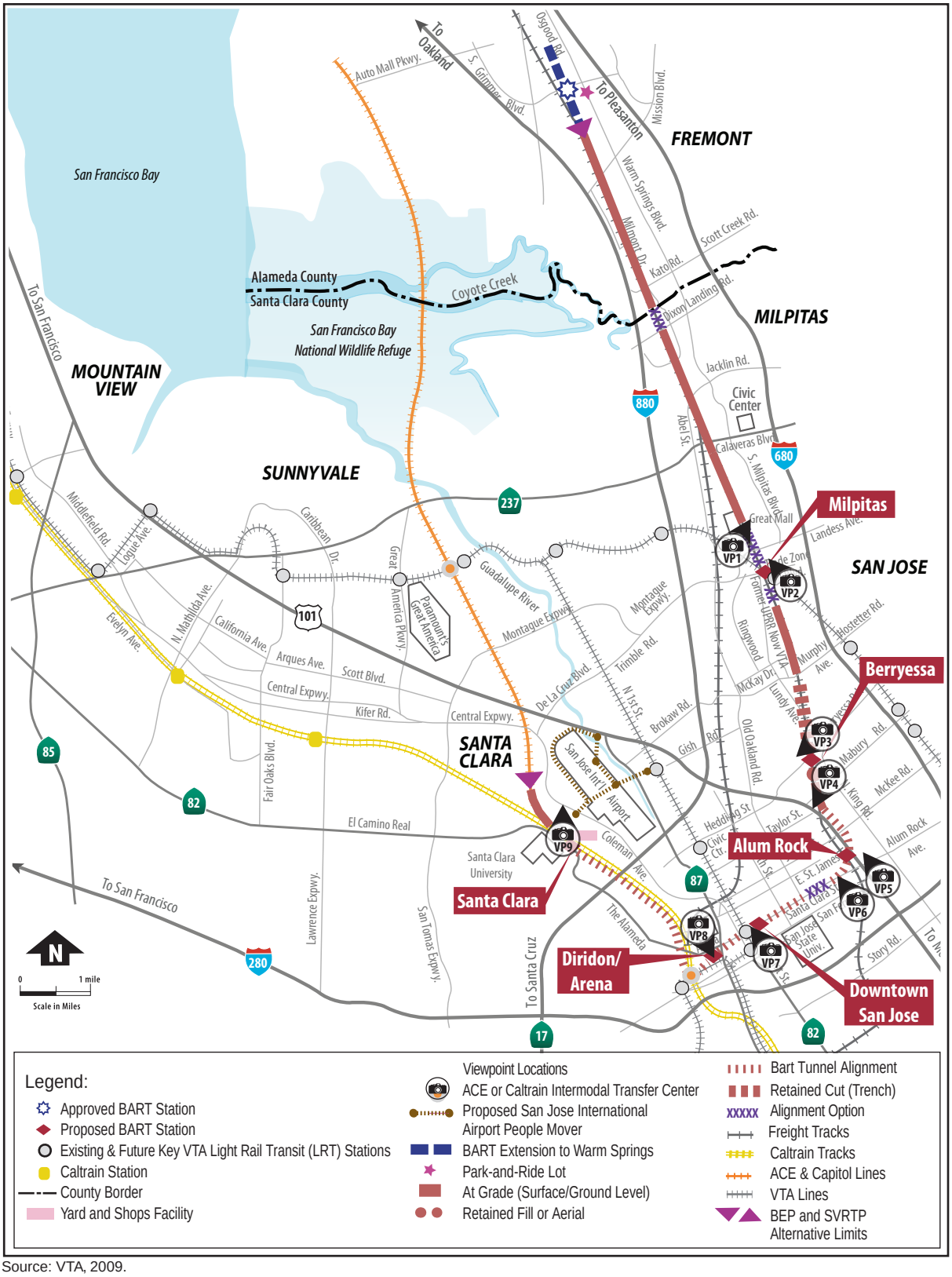
5.14.3 POTENTIAL IMPACTS

The assessment of adverse visual effects combines two visual affect components: visual resource change and viewer response to that change. Visual resource change is evaluated in terms of visual dominance and other specific visual effects of facilities that would be constructed under the BEP and SVRTP alternatives, together with the change in visual quality. Viewer responses to these changes are interpreted on the basis of viewer types identified. Viewer groups along the alignment include corridor residents, merchants, tourists, shoppers, workers, commuters, motorists, pedestrians, and bicyclists.

Viewer sensitivity or concern is based on the visibility of resources in the landscape, the proximity of viewers to the visual resource, the relative evaluation of viewers compared to the visual resource, the frequency and duration of views, the number of viewers, and the types and expectations of individuals and viewer groups. Generally, the closer a viewer is to the resource, the more dominant the resource and the greater its affect on the viewer. Public views are considered of much greater sensitivity than private views.

Generally, visual sensitivity increases with an increase in the total number of viewers, the frequency of viewing (e.g., daily or seasonally), and the duration of views (i.e., how long a scene is viewed). Also, visual sensitivity is higher for views seen by people who are driving for pleasure; people engaging in recreational activities such as hiking, biking, or camping; and homeowners. Sensitivity tends to be lower for views seen by people driving to and from work or as part of their work (U.S. Forest Service, 1974; Federal Highway Administration, 1983; U.S. Soil Conservation Service, 1978). Views from recreation trails and areas, scenic highways, and scenic overlooks are generally assessed as having high visual sensitivity.

Areas possessing sensitive viewer groups or offering scenic views were identified for the purpose of evaluating the visual effects of the project. Based on input from City staff, four viewpoint locations were selected for the BEP Alternative and an additional five viewpoints were selected for the SVRTP Alternative.



Source: VTA, 2009.

Figure 5.14-1: Viewpoint Locations

Visual simulations were prepared using computer-generated information overlaid on the photo images of the selected viewpoints. They were developed to show height and massing of the structural elements that are proposed at each location. Architectural features were included to make the proposed features appear realistic; however, the simulations are not intended to represent the final design or architectural expression of the proposed facility. Their purpose is to depict the general mass of key station elements as they relate to the surrounding areas. Architecture for the stations will be developed with the city partners and the community and be defined in subsequent phases of project design.

Figure 5.14-1 shows the viewpoint locations and general view direction. Each viewpoint is discussed below.

5.14.4 IMPACT DISCUSSION

This section describes the visual changes and effects associated with the BEP and SVRTP alternatives by visual analysis area. The impact discussion considers the potential for the BEP and SVRTP alternatives to substantially alter the existing visual character or quality of the surrounding area, adversely affect a scenic vista, and introduce substantial new sources of light and glare that could affect daytime and nighttime views in the area. Unless otherwise indicated, all project features mentioned from Fremont to Alum Rock Station in the City of San Jose are elements of both the BEP and SVRTP alternatives. All project features from Alum Rock Station to Santa Clara Station are elements of the SVRTP Alternative only.

Both the BEP and SVRTP Alternatives will result in the removal of trees, especially near the station sites. Removal of trees could degrade the existing visual quality in each applicable visual analysis area. The following mitigation measure, which would apply to both the BEP and SVRTP alternatives, and all visual analysis areas, would ensure that the overall visual quality in each visual analysis area would not be degraded as a result of tree removal.

> Mitigation Measure VIS-1: Removed trees will be replaced at a 1:1 ratio within the relevant visual analysis area.

The No Build Alternative consists of the existing transit and roadway networks and planned and programmed improvements in the SVRTC (see Section 2.6, Related Projects, for a list of these projects). The No Build Alternative projects would primarily involve expanding transit service on existing roadways, which would not be anticipated to adversely affect visual resources or sensitive views. Projects planned under the No Build Alternative would, however, undergo separate environmental review to determine whether the projects would result in adverse visual effects.

City of Fremont Visual Analysis Area

Within this visual analysis area, the proposed BEP and SVRTP alternative alignments would follow the UPRR corridor. In some areas the railroad tracks travel behind office

developments. Workers in the office buildings would be the primary viewers affected by the proposed alignment in these areas. This would not be considered an adverse visual effect since freight trains currently use the same corridor.

The proposed alignment is also located near designated scenic routes, such as I-880, Warm Springs Boulevard, and East Calaveras Boulevard. In these areas the proposed alignment would travel along existing UPRR tracks. The replacement of freight trains with BART trains along the UPRR tracks would not substantially alter existing views from the scenic routes and would therefore not alter the existing visual character and quality of the landscape.

In this visual analysis area, the alignment would remain at grade at all road crossings, which include Mission Boulevard, East Warren Avenue, and Kato Road. At all three road crossings, the alignment would cross these roadways on newly constructed bridge structures that would pass over these below-grade roadways. This area consists of mostly low-rise office and industrial structures and vacant land. The bridges would not affect visual quality for pedestrians from these locations. They would briefly block views of the Diablo Range for motorists driving east on these roads, but this effect would not be substantial because of the short duration of these views.

Two traction power substations and train control buildings would be located within this visual analysis area: Traction Power Substation SWA and Train Control Building S24, which would be located south of East Warren Avenue on the east side of the UPRR ROW, and Traction Power Substation SKR and Train Control Building S26, which would be located south of Scott Creek on the west side of the UPRR ROW. Traction power substations consist of a small, single-level, shed-like building and numerous metal towers with high-tension power lines. Because both substations would be placed in existing industrial areas, there would be no adverse visual effect.

Sound walls of 7 to 9 feet in height would be constructed on the east side of the alignment as noted in Section 5.10, Noise and Vibration, Table 5.10-5. Since the sound walls would not be greater than 9 feet in height from the ground and since the closest views would be from the backyards of residences in an urban area, there would be no adverse visual effect.

BART trains would pass behind residences in a small section at the southern end of the visual analysis area, just north of Dixon Landing Road. Although the BART trains would pass relatively close to some residences, this would not be considered an adverse visual effect since freight trains currently use the same corridor. Sound walls, fences, trees, and structures would reduce the potential for visual encroachment, and the visual intrusion would be of extremely short duration.

City of Milpitas Visual Analysis Area

The proposed BART alignment would follow the railroad corridor either at grade or below grade in a retained cut within this visual analysis area. The land uses in this landscape area are primarily industrial with some residential. As a result, new sources

of light and glare would not adversely affect day or nighttime views in the area. As discussed in Section 4.14, Visual Quality and Aesthetics, the City of Milpitas has designated East Calaveras Boulevard (SR 237), I-680, and I-880 as scenic connectors. I-680 and I-880 are also considered to be major visual gateways by the City of Milpitas. The BART alignment would intersect with East Calaveras Boulevard and would run between I-680 and I-880; however, the alignment would be located on an existing UPRR ROW and the replacement of freight trains with BART trains along the UPRR tracks would not substantially alter existing views from the scenic connectors or major visual gateways. Therefore, the proposed alignment would not alter the existing visual character and quality of the landscape.

At Dixon Landing Road, the BART tracks would continue at grade and cross the roadway on a new bridge structure. Dixon Landing Road would be reconstructed as a roadway underpass. A new bridge for the UPRR to cross over the roadway would also be constructed. The bridge crossing would be at the same level as surrounding uses and not appear inconsistent with other infrastructure in this urban transportation corridor. The new bridge would not be a major source of light or glare. As an underpass, Dixon Landing Road would change the visual character in the immediate areas, but would not affect scenic resources or block an existing scenic view.

High Voltage Substation SRC, Traction Power Substation SRR, Switching Station SRR, and Train Control Building S28 would be located west of the railroad ROW near Railroad Court. In addition to these facilities, a new 60-foot-high, tapered tubular steel tower and a second smaller tower would be constructed adjacent to the proposed high voltage substation, traction power substation, switching station, and train control building. Traction power substations consist of small, single-level, shed-like buildings and numerous metal towers with high-tension power lines. Because the substations, switching station, train control building, and towers would be placed in an existing industrial area, no substantial adverse effects on a scenic vista would result, nor would these features substantially degrade the existing visual character or quality of the area or its surroundings.

Sound walls of 4 to 12 feet in height would be constructed on the east and west sides of the alignment as noted in Section 5.10, Noise and Vibration, Table 5.10-5. Since the closest views of the sound wall would be from the backyards of residences in an urban area and no scenic viewsheds would be obstructed, there would be no adverse visual effect.

BART trains would pass behind residences along the corridor within this visual analysis area. Although the BART trains would pass relatively close to some residences, this would not be considered an adverse visual effect since freight trains currently use the same corridor. Sound walls, fences, trees, and structures would reduce the potential for visual encroachment, and the visual intrusion would be of extremely short duration.

Between East Curtis Avenue and Trade Zone Boulevard, there are two alignment options, Retained Cut Long and Retained Cut Intermediate. Under the Retained Cut Long Option, the alignment would transition into a retained cut from south of East Curtis

Avenue to south of Trade Zone Boulevard. Under the Retained Cut Intermediate Option, the alignment would transition into a retained cut farther south than under the Retained Cut Long Option (approximately 2,000 feet north of Montague Expressway), and continue past the Milpitas/San Jose city line to south of Trade Zone Boulevard. Neither option would obstruct the view of a scenic vista from either the east or the west side of the corridor, nor would they degrade the visual character or quality of the corridor or the surrounding area.

Two alternate Traction Power Substation SME locations are proposed just north of Montague Expressway. One alternate location would be just north of Montague Expressway within the alignment above the retained cut. The other alternate location would be east of the alignment within the existing (to be abandoned) UPRR Wye. The landscape currently consists of mixed-use urban development and implementing this option would not degrade the visual character or quality of the area or its surroundings.

In response to previous state environmental document clearance, the Great Mall expressed concern over visual effects to the mall due to the loss of landscaping along the eastern edge of the property adjacent to the tracks between Curtis Avenue and Montague Expressway. Refer to the *SVRTC BART Extension to Milpitas, San Jose, and Santa Clara FEIS Volume II – Responses to Comments* page P-30-37 Response to Comment P30.8 for a full discussion of visual effects to the Great Mall from the loss of landscaping associated with the Retained Cut Long Option. VTA staff determined that the loss of landscaping did not cause a substantial adverse effect due to the heavily urbanized nature of the landscape that did not qualify as a scenic vista or resource. In a recent site visit to the Great Mall, VTA staff observed that most of the landscaping that was to be removed to construct both the Retained Cut Long and Retained Cut Intermediate Options has been removed**.**

Milpitas Station

The Milpitas Station area would be located between Montague Expressway and Capitol Avenue and on the east side of the railroad, encompassing up to 27 acres of land. The station would consist of two 700-foot-long, 16-foot-wide (minimum) side platforms in a retained cut. Access to either station platform would be from a mezzanine situated at street level. A pedestrian overcrossing would extend from the east side of Capitol Avenue over the roadway to the adjacent Montague LRT station situated in the median of Capitol Avenue. An approximately 100-foot-high radio tower and an associated equipment shelter would be located west of the railroad ROW and south of South Milpitas Boulevard. One powerline that runs between Capitol Avenue and South Milpitas Boulevard would be relocated and transferred from wooden to steel poles in order to provide adequate clearance for the parking garage. A second line that crosses Montague Expressway near the railroad crossing would also be relocated. Appendix D, Station Designs, provides plans and elevations of the proposed station.

The Milpitas Station would create several new visual elements with effects associated with the six- to eight-level parking structure at the north end of the station area (which would be visible when looking northeast from East Capitol Avenue). The radio tower

would be located west of the railroad ROW and south of South Milpitas Boulevard (not visible in any of the figures). Due to the retained cut design feature that extends into the station area, the station would include two side platforms.

Relocation of existing powerlines would slightly change the existing visual environment. However this change would be consistent with the existing visual character, which already includes the two powerlines, and therefore is not discussed further.

Figure 5.14-2 (Viewpoint 1) is located on the VTA LRT Station platform looking northeast towards the railroad corridor and the Milpitas Station. There are large industrial and storage buildings to the north and residential apartments to the south (not within view in the figure). The Great Mall and newer commercial and residential buildings, also out of view, are located to the north and east. The Diablo Range is in the background. The primary viewers in this area are commuters using the LRT. The BART station, entry nodes, parking garage (an 8-level parking garage is depicted), and aerial walkway connecting the BART station and LRT platform would be visible from the LRT platform. The aerial walkway and concourse would be elevated approximately 20 feet.

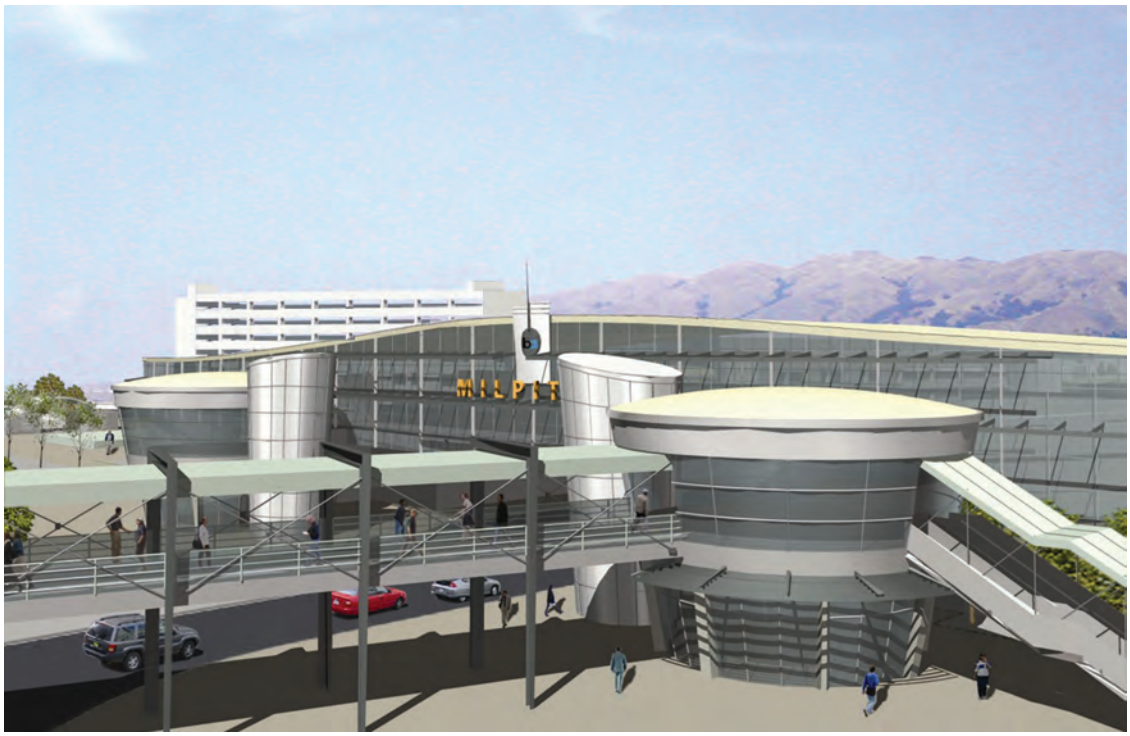
During the day, the BART station and aerial walkway would be a dominant visual feature from this viewpoint, due to their size and proximity. The BART station and aerial walkway would partly block views of the Diablo Range; however, this would be consistent with the density and scale of development in the surrounding areas, which includes structures such as the Great Mall. Also, a BART station at this location would not be out of context with existing uses, being adjacent to major transportation facilities (e.g., VTA LRT aerial trackway, LRT station, Montague Expressway, and Capitol Avenue). At nighttime, the lighting of the structure would combine with the lighting of the LRT station, but would not have a substantial adverse visual effect.

Figure 5.14-3 (Viewpoint 2) is located at “The Crossings at Montague” apartment complex. It looks northwest across an industrial and storage area. The immediate area consists mostly of low-rise industrial buildings and large open lots used for truck storage. Adjacent to this area is the new VTA LRT line and station, visible in the left-hand side of the photograph. The primary viewers in this area are residents of “The Crossing at Montague” apartment complex.

The station, aerial walkway, and parking garage would be visible from “The Crossings at Montague” to the southeast. However, the proposed station facilities are not immediately adjacent to sensitive viewers, and they replace a number of existing industrial buildings of inconsistent design. Therefore, the station would not have a substantial adverse effect on a scenic vista, and would not substantially degrade the existing visual character or quality of the area or its surroundings.

The bulk and height of the proposed buildings would be larger than those of the existing buildings; however, the buildings are not immediately adjacent to the viewers. Therefore, during the day, the Milpitas Station and parking garage would be only moderately dominant. The new BART station and multi-level parking structure would

Existing View of Milpitas Station Location (view to the northeast from VTA Montague Light Rail Station)



Visual Simulation of Milpitas Station (view to the northeast from VTA Montague Light Rail Station)

Source: VTA, 2008.

1967.5-500-062408

Figure 5.14-2: Viewpoint 1

Existing View of Milpitas Station Location (view to the northwest from "The Crossings at Montague" apartments)

Visual Simulation of Milpitas Station (view to the northwest from "The Crossings at Montague" apartments)

Source: VTA, 2008.

Figure 5.14-3: Viewpoint 2

create a denser urban aesthetic environment. These structures would increase the intactness from this viewpoint, as they would replace a series of existing industrial buildings of inconsistent design as compared to the BART station and multi-level parking structure of consistent design. Since this area is undergoing transition from an industrial area to a more urbanized transit-oriented area, the BEP and SVRTP alternatives would not substantially affect the visual unity of the site or its surroundings. The distance of the buildings and their location at the same elevation would minimize any effects related to glare.

At night, lighting from the parking structure would be noticeable from this viewpoint. Lights from trains and the parking structure may create new sources of light and glare for residences southeast of the Milpitas Station and parking structure that would adversely affect nighttime views in the area. Lighting would be designed to focus on the BART facilities to minimize spillover into the surrounding areas. This would ensure that the station and parking structure would not be vivid at night and would not affect the intactness or unity of nighttime views.

A tapered tubular steel radio tower, approximately 100 feet in height, would be required at the Milpitas Station. The radio tower would be potentially sited at the southeast corner of Montague Expressway and the alignment, adjacent to the parking garage. The tower height would be visually mitigated by the adjacent parking structure. In addition, the tower would not be incompatible with the industrial uses on the north side of Montague Expressway.

City of San Jose Visual Analysis Area

Under the BEP and SVRTP alternatives, this visual analysis area begins south of the Milpitas Station just north of Trade Zone Boulevard. From Montague Expressway to Berryessa Road, the majority of the alignment would be constructed below grade and would not be visible from the surrounding area.

The City of San Jose General Plan identifies several scenic resources, including broad views of Santa Clara Valley, the hills and mountains surrounding the valley, the urban skyline, and the baylands. Thoroughfares providing visual access to San Jose's scenic resources are designated as scenic routes, of which there are two types: rural scenic corridors and landscaped throughways. The proposed alignment would pass under several Landscaped Throughways, including US 101, SR 87, and I-880 via the proposed Downtown San Jose BART tunnel. Therefore, there will be no effects on scenic vistas at these locations.

BART trains would pass behind residences along the corridor. Although the BART trains would pass relatively close to some residences, this would not be considered an adverse visual effect since freight trains currently use the same corridor. Sound walls, fences, trees, and structures would reduce the potential for visual encroachment, and the visual intrusion would be of extremely short duration.

Sound walls of 4 to 10 feet in height would be constructed on the east and west sides of the alignment as noted Section 5.10, Noise and Vibration, Table 5.10-5. Since the sound walls would not be greater than 10 feet in height and since the closest views would be from the backyards of residences in an urban area, there would be no adverse visual effect.

Slightly south of Trade Zone Boulevard, Traction Power Substation SMB would be located on the west side of the alignment. Because the substation would be placed in an existing industrial area, it would not have an adverse effect on visual quality.

Train Control Building S44 would be located immediately south of Hostetter Road on the east side of the alignment. The surrounding area is urbanized, and land uses are predominantly residential with a few commercial uses. The existing area is a highly degraded, vacant parcel adjacent to the railway corridor. Construction of a train control building in the area would be consistent with the surrounding visual character. Additionally, the size and mass of the train control building would be designed to fit in with the surrounding urban environment so that it does not visibly conflict with the urban setting. VTA will collaborate with the city, community, and business groups to develop project facilities compatible with the urban setting and streetscape. Therefore, visual changes caused by the train control building would not have an adverse effect on a scenic vista, and would not substantially degrade the existing visual character or quality of the surrounding area.

Aerial Crossing at Berryessa Road

Under both the BEP and SVRTP alternatives, an aerial structure would be constructed over the existing roadway of Berryessa Road. Figure 5.14-4 (Viewpoint 3) is located on the eastbound side of Berryessa Road looking west towards the railroad tracks. Berryessa Road is a four-lane road with single-family residences along the north side of the street. Upper Penitencia Creek runs along the south side. The street is lined with mature trees and there is a sidewalk and bike lane on both sides. Farther west are the large, paved lots of the San Jose Flea Market. Primary viewers in this area include nearby residents, pedestrians, bicyclists, and flea market merchants and shoppers.

The aerial structure would be constructed approximately 22 feet above Berryessa Road and would be visible as it crosses perpendicular to Berryessa Road at the railroad tracks. During the day, the aerial structure would be a dominant visual feature; however, it would not substantially degrade the existing visual character or quality of the site and its surroundings. The structure would be designed to be functional and would not be very vivid. The aerial structure does not block any views or disrupt scenic sightlines, and it is not out of place in a busy transportation corridor. At night, the aerial structure would be less dominant, because there are minimal views from Berryessa Road at night and the structure would not be lighted.

Existing View of Aerial Crossing Location at Berryessa Road (view to the southwest from Berryessa Road)

Visual Simulation of Aerial Crossing at Berryessa Road (view to the southwest from Berryessa Road)

Source: VTA, 2004;VTA, 2008.

Figure 5.14-4: Viewpoint 3

Berryessa Station

Under both the BEP and SVRTP alternatives and either station option, Berryessa Station would be constructed just south of Berryessa Road to Mabury Road. Figures 5.14-5a and 5.14-5b (Viewpoint 4) are from the end of Salamoni Court, near a single-family housing complex looking southwest towards a nearby industrial area consisting of warehouses and parking areas. The railroad corridor and San Jose Flea Market are beyond the industrial area and out of view in the figure. Primary viewers in this area include local residents, industrial workers, pedestrians, bicyclists.

As part of the Berryessa Station North Option, an eight-level parking structure would be built on 4.3 acres at the south end of the site, east of the aerial guideway near a residential neighborhood. Figure 5.14a, shows a simulated view of the parking structure under the Berryessa Station North Option. Surface parking would be built to the south of the parking garage, and the station would be located out of the view to the north. Under the Berryessa Station South Option, the parking structure would be located on the west side of the tracks, and further from the residential area, and behind the station shown in Figure 5.14-5b. As shown in Figure 5.14-5a, under the South Option, only the station site would be visible from this viewpoint.

Although visible from a residential area, the Berryessa Station footprint is already developed with industrial buildings, roads, and parking lots; thus, the addition of a parking structure and a station would not have a substantial adverse effect on a scenic vista, and would not substantially degrade the existing visual character or quality of this area or its surroundings. Views from the parking structure under either option could potentially be of nearby homes, thus affecting privacy of the residents. However, under either option, the upper levels of the parking structure would have appropriate screening to prevent views into residential areas to the east. Furthermore, either option would include at least an eight-foot high community wall that would screen the station area from adjacent residential areas where necessary.

A tapered tubular steel radio tower, approximately 100 feet in height, would also be visible from the surrounding areas. This tower would be constructed adjacent to the parking garage in either option. Since the majority of the structure height would be absorbed into the parking structure, the visual affect will be minimized on adjacent development.

Under either station option, Traction Power Substation SBE would be located south of Berryessa Road under the BART aerial structure within the Berryessa Station footprint surrounded by BART facilities to the east and south. Berryessa Road is to the north. Adding a traction power substation at this location would not have a substantial adverse effect on a scenic vista, and would not substantially degrade the existing visual character or quality of the area or its surroundings.

The alignment may create a new source of light and glare where the tracks are elevated from Berryessa Road to US 101. However, because the land uses are primarily industrial in this section, this would not affect the scenic quality of the area.

Existing View of Berryessa Station South Option Location (view to the southwest from the end of Salamoni Court)

Visual Simulation of Berryessa Station North Option (view to the southwest from the end of Salamoni Court)

Source: VTA, 2009.

Figure 5.14-5A: Viewpoint 4, Berryessa Station North Option

Existing View of Berryessa Station South Option Location (view to the southwest from the end of Salamoni Court)

Visual Simulation of Berryessa Station South Option (view to the southwest near Salamoni Court)

Note: This simulation is from a location closer to the station than the existing view.

Source: VTA, 2009.

Figure 5.14-5B: Viewpoint 4, Berryessa Station South Option

High Voltage Substation SMR, Switching Station SSM, Gap Breaker Station SXB, and Train Control Building S56 would be located near Berryessa Station. The addition of these facilities in a predominantly heavy-industrial area would not have a substantial adverse effect on a scenic vista, and would not substantially degrade the existing visual character or quality of the area or its surroundings.

A new high voltage line would begin at the high voltage substation, run south parallel to the BART alignment, continue along Marburg Way, then run along Las Plumas Avenue to King Road. The existing PG&E high voltage line on King Road would be upgraded, extending for approximately 550 feet to the PG&E Mabury Substation. This line would be located overhead on poles that would replace the existing poles and support the existing electrical and communications lines already in place along Las Plumas Avenue. The addition of overhead lines in a predominantly heavy industrial area would not have a substantial adverse effect on a scenic vista, and would not substantially degrade the existing visual character or quality of the area or its surroundings.

Las Plumas Yard Option (BEP Alternative)

The Las Plumas Yard Option of the BEP Alternative would begin near Nicora Avenue and extend to Lower Silver Creek, east of US 101. The facility would encompass approximately 26 acres. The facility would be set back approximately 100 feet from the top of the north bank or tree dripline of Lower Silver Creek, whichever is applicable along the property line. The facility would be constructed within an existing industrial area; therefore, the visual changes caused by the yard and shops facility would not substantially degrade the existing visual character or quality of the surrounding area.

Alum Rock Station

South of US 101, the SVRTP Alternative alignment continues in a tunnel alignment and transitions into Alum Rock Station just east of 28th Street and north of Santa Clara Street. Figure 5.14-6 (Viewpoint 5) is located on the corner of Santa Clara Street and 28th Street looking northeast near the historic Five Wounds National Portuguese Church and School. In addition to the church facilities, land uses in this area are primarily commercial and industrial with low-rise buildings and surface parking lots dominating the surrounding landscape. Viewers in this area would primarily consist of church attendees, store patrons, and passing motorists, pedestrians, and bicyclists.

A five-story parking structure would be located on 28th Street between Julian Street and East Santa Clara Street and would replace the existing Monarch Trucking Company warehouses. The parking structure would be visible to pedestrians and motorists at East Santa Clara and 28th streets. The multi-level parking structure would be similar in height and mass to the Monarch Trucking Company warehouses. The structure would increase intactness and unity from this viewpoint. Landscape and streetscape improvements along 28th Street would be of comparable height and mass to other buildings currently on the site. Thus, it would not degrade visual quality.

Existing View of Alum Rock Station and Parking Garage Location
(view to the north from East Santa Clara Street)

Visual Simulation of Alum Rock Station and Parking Garage
(view to the north from East Santa Clara Street)

Source: VTA, 2008.

Figure 5.14-6: Viewpoint 5

Station entrances and signage for the underground Alum Rock Station would be visible along 28th Street between Julian Street and East Santa Clara Street. There would also be new landscaping, streetlights, and sidewalks along 28th Street for the Alum Rock Station.

The historic Five Wounds National Portuguese Church, at the southeast corner of East Santa Clara Street and 28th Street, stands just south of the Alum Rock Station and is considered a scenic resource. Since this station is underground, the parking structure would be the only structure of notable height and mass. The Alum Rock Station parking structure has been capped at 5 levels so as not to visually overwhelm the historic Five Wounds National Portuguese Church and to be more visually compatible with the historic nature of this site. The parking structure would not cause substantial contrast with the scale or visual context of the surrounding landscape. Station entrances would be closer to the church structure, but are anticipated to be no more than one story in height, or station entrances may consist only of an aboveground parapet wall. As a result, the SVRTP Alternative would not visually affect Five Wounds National Portuguese Church because the SVRTP Alternative would not block views to or from the church. Refer to Section 5.4, Cultural and Historic Resources, for a discussion of the effects of the SVRTP Alternative on the Five Wounds National Portuguese Church.

At night, lighting from the parking structure would be noticeable by surrounding areas. The lighting would be designed to focus on BART facilities and minimize spillover of light and glare into adjacent areas. This would ensure that the station and parking structure would not be vivid at night and would not affect the intactness or unity of nighttime views.

Coyote Creek Vent Structure

Between 17th and 12th Streets both north and south of Santa Clara Street, there are five sites under consideration for the location of a mid-tunnel ventilation structure. For reference purposes, a simulation has been prepared for the site located at Santa Clara Street and 13th Street.

Figure 5.14-7 (Viewpoint 6) is located in downtown San Jose at the northwest corner of East Santa Clara Street and North 13th Street intersection. The proposed Vent Structure location is within an existing surface parking lot. The primary viewers from this viewpoint are patrons of the nearby commercial areas, as well as passing motorists, pedestrians, and bicyclists.

The vent structure would be approximately 90 by 140 feet in size, and 25 feet in height. As shown on Figure 5.14-7 (Viewpoint 6) the vent structure would be sited in an existing parking lot, surrounded by urbanized development. The size and mass of the vent structure would be designed to fit in with the surrounding urban environment so that it would not visibly conflict with the urban setting. VTA will continue to work with the city, community, and business groups in developing SVRTP Alternative facilities compatible with the urban setting and streetscape. The visual changes caused by the vent structure would not have an adverse effect on a scenic vista, and would not

Existing View of the Vent Structure Location near Coyote Creek (view to the northwest from the East Santa Clara Street and North 13th Street inersection)

Visual Simulation of the Vent Structure near Coyote Creek (view to the northwest from the East Santa Clara Street and North 13th Street intersection)

Source: VTA, 2008.

Figure 5.14-7: Viewpoint 6

substantially degrade the existing visual character or quality of the surrounding area. The other vent structure locations would have comparable size, mass, and effects.

Downtown San Jose Station

The Downtown San Jose Station would be located underground between 4th and San Pedro streets. Station entrances would be located between 2nd and Market streets. One entrance would be located at the southwest corner of West Santa Clara and Market streets. A second entrance would be located on the south side of East Santa Clara Street between 1st and 2nd streets. Another potential future entrance would be located on the north side of East Santa Clara Street mid-block between 1st and 2nd streets.

The station would include two vent shafts. One shaft would be located north of East Santa Clara Street between 2nd and 3rd streets. The other vent shaft would be located at the southwest corner of West Santa Clara and Market streets. The land use in the vicinity of this station is dominated by commercial uses, including restaurants and bars. The primary viewer groups from this viewpoint would be motorists, tourists, pedestrians, and bicyclists.

Pedestrian access (elevators and escalators) to the station would be from several station entrances between 2nd and Market streets. As shown in Figure 5.14-8 (Viewpoint 7), station entrances, ventilation structures, and signage would be visible above ground elements. During the day the station entrances and signage would not be dominant features in comparison to the busy street and downtown buildings. The design of the station entrances would be simple; they would not distract from the surrounding architecture, disrupt the intact nature or unity of the area, or block any significant views. At night, light and glare from the station entrances would be minimal, and would be designed to reduce spillover of light, thereby minimizing any adverse effects of light and glare. These elements would not have an adverse effect on a scenic vista or substantially degrade the existing visual character of the surrounding area. Vent structures would be located in vacant areas, commercial parking lots, sidewalks, and landscaping. The surrounding area is very urbanized and the size and mass of the ventilation structures would be designed to fit in with the surrounding urban environment so they would not visibly conflict with the urban setting. VTA would continue to work with city, community, and business groups in developing project facilities that would become part of the streetscape.

The landscaping, accent street lighting, bus transit furniture, signage and other street furnishings along East/West Santa Clara Street between 4th and San Pedro streets provided as part of the station will improve the visual quality of the area for pedestrians and motorists traveling through downtown. Streetscape improvements would be guided by the City of San Jose's Master Streetscape Plan. Refer to Section 5.4, Cultural and Historic Resources, for a discussion of the effects of this design change on historic architectural resources in the San Jose Downtown Commercial Historic District.

Existing View of Downtown San Jose Station Location
(view looking southwest from northeast corner of Market Street and Santa Clara Street)

Visual Simulation of Downtown San Jose Station
(view looking southwest from northeast corner of Market Street and Santa Clara Street)

Source: VTA, 2008.

Figure 5.14-8: Viewpoint 7

Diridon/Arena Station

Diridon/Arena Station would be constructed south of Santa Clara Street between Los Gatos Creek and the Caltrain railroad tracks. The station would include four vent shafts, two at each end of the station. One station entrance would be located on the west end of the station just west of Cahill Street and south of West Santa Clara Street. The second station entrance would be located between Montgomery and Autumn Streets just north of the proposed parking structure.

Figure 5.14-9 (Viewpoint 8) is located at the northeast corner of Santa Clara and Autumn Streets, looking south at the site of a proposed multi-level parking structure. There are numerous parking lots and passenger loading zones in the vicinity. The primary viewers in this area are train passengers, motorists, pedestrians, and bicyclists. The station would be located underground and not visible from the viewpoint of Figure 5.14-9 (Viewpoint 8).

As shown in Figure 5.14-9 (Viewpoint 8), an eight-level parking structure would be located south of the station between Montgomery and Autumn streets. The visual effects caused by this parking structure would not have an adverse effect on a scenic vista, and would not substantially degrade the existing visual character or quality of the surrounding area. In addition, the lighting would be focused on the BART facilities and designed to minimize light and glare in adjacent areas. This would ensure that the parking structure would not be vivid at night and would not affect the intactness or unity of nighttime views. Refer to Section 5.4, Cultural and Historic Resources, for a discussion of the effects on historic architectural resources at and near the Diridon Station.

Construction of the Diridon/Arena Station would include improvements to the existing VTA Bus Transit Center located just north of the historic Cahill Station and the replacement of an existing parking lot with a new Non-VTA Bus Transit Center located just south of the historic Cahill Station. However, the design of the Diridon/Arena Station would be consistent with the San Jose Downtown Streetscape Master Plan and would be located in an urbanized area characterized by a train depot and large event arena; therefore the bus transit centers would not be visually inconsistent with existing uses.

Underground station entrances and signage would be visible to pedestrians and merchants along Santa Clara Street between Autumn Street and Bush Street. The majority of station entrances would affect vacant areas, commercial parking lots, sidewalks, and landscaping. The surrounding area is very urbanized and station entrances and signage would not visibly conflict with the urban setting.

Ventilation structures within the Diridon/Arena Station area would be located at street level. The structures would be visible to merchants, workers, pedestrians/bicyclists, and motorists along Santa Clara Street between Autumn Street and Bush Street. The majority of such ventilation structures would be sited in vacant areas, commercial parking lots, sidewalks, and landscaping. The surrounding area is very urbanized and

Existing View of Diridon / Arena Station and Parking Garage Location
(view to the south from north of Diridon Caltrain Station)

Visual Simulation of Diridon / Arena Station and Parking Garage
(view to the south from north of Diridon Caltrain Station)

Source: VTA, 2008.

Figure 5.14-9: Viewpoint 8

the size and mass of the ventilation structures would be designed to fit in with the surrounding urban environment so they would not visibly conflict with the urban setting. VTA would continue to work with city, community, and business groups in developing project facilities that would become part of the streetscape.

Traction Power Substation SDS would be located to the west of the Diridon/Arena Station at the southwest corner of White and West Santa Clara streets in an area surrounded by transportation-related infrastructure, including a train depot, railroad tracks, light rail facilities, and a bus transit center. Other surrounding land uses include residential developments to the west. The size and mass of the traction power substation would be designed to fit in with the surrounding urban environment so that it does not visibly conflict with the urban setting. VTA will continue to work with the city, community, and business groups in developing project facilities compatible with the urban setting and streetscape. The addition of electrical facilities would not have an adverse effect on a scenic vista, and would not substantially degrade the existing visual character or quality of the surrounding area.

On the east side of Stockton Street between approximately Schiele Avenue and Villa Avenue, there are four optional locations for Tunnel Ventilation Structure STS, an aboveground facility with an associated vent shaft, and Auxiliary Power Substation SST. Two potential locations are on the east side of Stockton Avenue near Schiele Avenue. Two other locations are also on the east side of Stockton Avenue near Villa Avenue. All four alternate vent structure locations are in an industrial area. The vent structure would be approximately 90 by 140 feet in size, and 25 feet in height. The surrounding area is urbanized, and the size and mass of the ventilation structure would be designed to fit in with the surrounding urban environment so it would not visibly conflict with the urban setting. VTA will continue to work with the city, community, and business groups in developing project facilities that would become part of the streetscape. The visual changes caused by the ventilation structure would not have an adverse effect on a scenic vista, and would not substantially degrade the existing visual character or quality of the surrounding area.

City of Santa Clara Visual Analysis Area

The City of Santa Clara Visual Analysis Area extends from just north of I-880 to just north of De La Cruz Boulevard. The alignment would ascend from an underground tunnel just north of I-880, “daylight” through a portal at Newhall Street, and follow the railroad corridor to the Santa Clara Caltrain Station area. The alignment would introduce several new visual elements and effects.

The Newhall Yard and Shops Facility would begin north of the west tunnel portal at Newhall Street in San Jose and extend to De La Cruz Boulevard in Santa Clara, where a single tail track would cross under the De La Cruz Avenue overpass and terminate on the other side of the overpass. The facility would be long and narrow, encompassing approximately 69 acres, and would be constructed on the former UPRR Newhall Yard. All structures and facilities would be located within the smaller yard and shops area that

is bounded by I-880 to the south, railroad tracks to the west, and approximately De La Cruz Boulevard to the north. The yard area is industrial in nature, and the uses described would be compatible with the existing railroad yard uses and industrial character and quality. The facility would not have an adverse effect on a scenic vista and would not substantially degrade the existing visual character or quality of the surrounding area. Lighting at this facility would be downward facing, and would be consistent with the industrial location.

Santa Clara Station

The Santa Clara Station would be an at-grade station constructed primarily between the Caltrain tracks to the west, Coleman Avenue to the east, and Brokaw Road to the south. The station would include a 700-foot-long, 28-foot-wide center platform with a mezzanine one level above. An approximately 400-foot-long pedestrian connection would extend from the mezzanine level to the Santa Clara Caltrain Station to the west and a five-bay bus transit center and kiss-and-ride area to the east.

Figure 5.14-10 (Viewpoint 9) looks east from the west side of El Camino Real toward the existing Santa Clara police station, the three-story gray building in the left of the photo. The BART Santa Clara Station aerial walkway and parking garage would be visible from this location. The existing historic Tower and sheds can be seen in this view as the orange structures in the center of the photo. The primary viewer groups in this area are travelers along El Camino Real, employees of local businesses, residents of local residential areas, and pedestrians/bicyclists.

The historic Santa Clara Interlocking Control Tower and Speeder and Utility Sheds (components of the historic Santa Clara Depot), located north of Benton Street, would be relocated south of the Santa Clara Depot within an existing Caltrain parking lot. Refer to Section 5.4, Cultural and Historic Resources, for a discussion of the historic architectural effects resulting from the relocation of the historic tower and sheds.

A parking structure with up to six levels would be located on 3.2 acres on the north end of the station area, as depicted in Figure 5.14-10 (Viewpoint 9). Additional surface parking and/or future transit facilities would be located to the east within the station area, as needed. The parking structure would be constructed in a primarily industrial area and the bulk and height of the structures would be similar to those of the existing industrial buildings.

During the daytime, the BART station, parking structure, and aerial walkway would be a dominant visual feature from this viewpoint. The station and the aerial walkway would be intentionally vivid to create a gateway to the City of Santa Clara. The surrounding area is developed with existing institutional and industrial uses, roadways, railroad ROW, and other transportation-related infrastructure. The addition of the station and parking structure would be visually compatible with the surrounding land uses, and would not degrade the existing visual character or quality of the surrounding area. The station and aerial walkway would block existing power lines and industrial uses while strengthening the railroad/transportation aesthetic of the immediate area. While the

Existing View of Santa Clara Station and Parking Structure Location
(view to the east from El Camino Real)

Visual Simulation of Santa Clara Station and 6 Level Parking Structure
(view to the east from El Camino Real)

Source: VTA, 2008.

Figure 5.14-10: Viewpoint 9

BART station and aerial walkway would create a denser urban aesthetic environment, the facilities would not block any scenic views.

At night, lighting from the BART station and from the Santa Clara Caltrain Station would be designed to create a safe environment. The station would remain vivid, but less so than during the day. Intactness and unity would remain high due to the nighttime lighting at both the BART and Caltrain stations. Effects related to light and glare would be minimized because light sensitive land uses (i.e., residences) are located the same distance from the new facilities and design measures would be utilized to reduce spillover of light. Furthermore, the area already has existing lighting associated with the Santa Clara Police Station and street lights along roadways and sidewalks.

5.14.5 CUMULATIVE IMPACTS

Over the last 30-40 years, the SVRTC has become increasingly urbanized. During this period, the built environmental has increased significantly with the commensurate reduction in undeveloped properties. The corridor is bordered primarily by a built landscape including industrial, commercial, and residential structures.

The extent of influence that transportation projects have had on visual changes in the corridor has typically been focused on station areas, where an increased number of buildings have been introduced to house mixed-use development. This development is consistent with the ongoing trend of urbanization in the Bay Area and would support jurisdictions' efforts to site in-fill development and higher densities within existing urban and suburban areas.

Cumulative visual effects from the development of the projects planned within the SVRTC would increase the scale and mass of the built environment surrounding the proposed above ground station sites. Cumulative visual effects from development of projects planned within downtown San Jose would not substantially alter an already highly developed visual environment. The BEP and SVRTP alternatives, in combination with other projects in the area and region, will encourage more intense urban development around the station sites, which will cumulatively alter the existing visual environment. But, as documented previously in this section, these changes are consistent with the existing visual character and therefore not cumulatively considerable.

Implementing the BEP and SVRTP alternatives on the proposed alignment would not directly contribute to cumulative visual effects. The majority of the alignment uses former and existing railroad ROW. Replacing freight trains with BART trains would not substantively alter existing visual resources or views to or from the corridor. Likewise, the station entrances for the underground portions of the alignment would be located in already developed urban areas consistent with the existing visual environment.